UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/929,277	08/15/2001	Keith Bentley	36488-174716	8201

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Washington, DC 20043-9998

EXAMINER
BLACK, LINH

ART UNIT	PAPER NUMBER
2163	

DATE MAILED: 12/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>06 October 2005</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-36 and 117* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-36 and 117* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>05 October 2001</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some *   c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>12/2/02</u>.

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

This communication is in response to the document dated 10/6/2005. Claims 1-36 and

117 are pending in the application. Claims 1, 19, and 117 are independent claims.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-2, 5-7, 10-12, 15-30, 33-36 and 117 are rejected under 35

U.S.C. 103(a) as being unpatentable over Forecast et al. (US 6230200), and further in

view of Shebini (4858146).

As per claims 1,19, Forecast et al. teach storing at least one root storage in a storage

area; storing a model directory in said at least one root storage; storing at least one

model in said model directory – col. 10, lines 35-55; storing a element list and a control

element list in said at least one model, said graphic element list having element chunks

containing graphic elements and said control element list having element chunks

containing control elements – col. 1, line 65 to col. 2, line 30; col. 34, lines 10-35; col.

57, lines 2-65; assigning a pre-selected number of elements to each element chunk;

allocating each element to an element chunk in one of said control element list and said

element list – col. 10, line 35 to col. 11, line 25; col. 24, lines 1-64; col. 62, lines 19-37.

However, Forecast et al. do not explicitly disclose a graphic element. Shebini teaches

automated design of structures using a finite element database – the title; "partial or full

modeling of the structure from an interactive graphics work station by using known

programs..." – col. 10, lines 49-51; models in a database – col. 14, lines 24-34; list of

elements – col. 20, lines 25-39; col. 22, line 65 to col. 23, line 50. Thus, it would have

been obvious to one of ordinary skill in the art at the time of the invention to combine

Forecast et al.'s and Shebini's teachings to effectively manage large graphic files for

better storage/retrieval/manipulation of large files.

As per claims 2, 20, Forecast et al. teach compressing and storing each element chunk

– col. 10, lines 56-67; col. 11, lines 32-57; col. 17, lines 25-42. Forecast et al. do not

explicitly disclose graphic element list. Shebini teaches models in a database – col. 14,

lines 24-34; list of elements – col. 20, lines 25-39; col. 22, line 65 to col. 23, line 50.

Thus, it would have been obvious to one of ordinary skill in the art at the time of the

invention to combine Forecast et al. and Shebini's teachings to effectively manage large

graphic files for better storage/retrieval/manipulation of large files.

As per claims 5, 23 Forecast et al. teach

wherein said pre-selected number is a maximum number of elements – col. 17, line 35

to col. 18, line 6; col. 24, lines 11-64.

As per claims 6, 24, Forecast et al. teach

creating an additional element chunk when the number of elements exceeds said pre-

selected number of elements assigned to each element chunk; assigning said pre-

selected number of elements to said additional element chunk; and storing new

elements in said additional element chunk – col. 2, lines 52-65; col. 7, lines 9-23; col.

63, lines 5-32; col. 65, lines 13-53.

As per claims 7, 25, Forecast et al. teach compressing each new element chunk – col.

10, lines 56-67; col. 11, lines 32-57; col. 17, lines 25-42. Forecast et al. do not explicitly

disclose graphic element list. Shebini teaches models in a database – col. 14, lines 24-

34; list of elements – col. 20, lines 25-39; col. 22, line 65 to col. 23, line 50. Thus, it

would have been obvious to one of ordinary skill in the art at the time of the invention to

combine Forecast et al. and Shebini's teachings to effectively manage large graphic

files for better storage/retrieval/manipulation of large files.

As per claims 10, 28, Forecast et al. teach

wherein said pre-selected number is a maximum number of elements - col. 17, line 35

to col. 18, line 6; col. 24, lines 11-64.

As per claims 11, 29, Forecast et al. do not explicitly teach associating a header with

said at least one root storage. Shebini teaches models in a database – col. 14, lines

24-34; list of elements – col. 20, lines 25-39; col. 22, line 65 to col. 23, line 50; headers

in models – col. 13, lines 10-21. Thus, it would have been obvious to one of ordinary

skill in the art at the time of the invention to combine Forecast et al.'s and Shebini's

teachings to effectively manage large graphic files for better

storage/retrieval/manipulation of large files.

As per claims 12, 30, Forecast et al. teach wherein the computer system is the Internet

– col. 7, lines 3-8.

As per claims 15, 33 Forecast et al. teach

wherein said storage area is a file – col. 10, lines 35-46.

As per claims 16, 34, Forecast et al. do not teach a computer aided design program.

Shebini teaches models in a database – col. 14, lines 24-34; fig. 1, item 10; col. 16,

lines 5-66.

As per claims 17, 35, Forecast et al. teach storing at least one root storage in a storage

area – col. 10, lines 35-55; session information – col. 17, lines 25-63; col. 45, line 22 to

col. 46, line 65; "unique" handle to the stream – col. 38, lines 25-62; Forecast et al. do

not explicitly teach header stream. Shebini teaches models in a database – col. 14,

lines 24-34; list of elements – col. 20, lines 25-39; col. 22, line 65 to col. 23, line 50;

headers in models – col. 13, lines 10-21. Thus, it would have been obvious to one of

ordinary skill in the art at the time of the invention to combine Forecast et al.'s and

Shebini's teachings to effectively manage large graphic files for better

storage/retrieval/manipulation of large files.

As per claims 18, 36, Forecast et al. teach

the step of storing in the root storage at least one of a stream and a storage, neither of

which are contained in the model directory – col. 6, lines 30-57; col. 10, lines 35-67.

As per claim 117, Forecast et al. teach

storing at least one root storage in the main storage area; storing a model directory in

said at least one root storage; storing at least one model element list in each model

directory - col. 10, lines 35-55; compressing and storing each element chunk – col. 10,

lines 56-67; col. 11, lines 32-57; col. 17, lines 25-42; backup for files maintained on disk

in the cached disk array – col. 7, lines 47-67; col. 27, line 34 to col. 28, line 33; modified

elements/files – col. 20, lines 34-65; reading compressed data – col. 7, lines 38-46.

However, Forecast et al. do not explicitly disclose a graphic element. Shebini teaches

automated design of structures using a finite element database – the title; "partial or full

modeling of the structure from an interactive graphics work station by using known

programs..." – col. 10, lines 49-51; models in a database – col. 14, lines 24-34; list of

elements – col. 20, lines 25-39; col. 22, line 65 to col. 23, line 50. Thus, it would have

been obvious to one of ordinary skill in the art at the time of the invention to combine

Forecast et al.'s and Shebini's teachings to effectively manage large graphic files for

better storage/retrieval/manipulation of large files.

Claims 3-4, 8-9, 13-14 and 31-32 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Forecast et al. (US 6230200), Shebini (4858146), and further in view

of Ginter et al. (us 6948070).

As per claims 3-4, and 8-9, Forecast et al. teach compressing and storing each element

chunk – col. 10, lines 56-67; col. 11, lines 32-57; col. 17, lines 25-42. Forecast et al. do

not explicitly disclose graphic element list. Shebini teaches models in a database – col.

14, lines 24-34; list of elements – col. 20, lines 25-39; col. 22, line 65 to col. 23, line 50.

However, Forecast et al. and Shebini et al. do not explicitly disclose encrypting each

element chunk. Ginter et al. teach encrypting of elements – col. 8, lines 60-67;

encrypt/decrypt engine – col. 67, lines 9-55; compression/decompression engine – col.

68, lines 5-21. Thus, it would have been obvious to one of ordinary skill in the art at the

time of the invention to combine Forecast et al. and Shebini's teachings to effectively

and securely manage large graphic files for better storage/retrieval/manipulation of large

files.

As per claims 13-14, 31-32, Forecast et al. teach wherein the computer system is the

Internet – col. 7, lines 3-8. However, Forecast et al. and Shebini do not explicitly teach

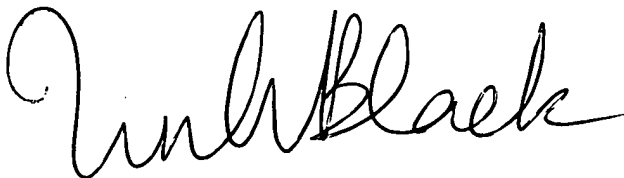local are network. Ginter et al. teach communication networks such as LAN, WAN,

etc...- col. 160, lines 9-25. Thus, it would have been obvious to one of ordinary skill in

the art at the time of the invention to combine Forecast et al.'s, Shebini's, and Ginter et

al.'s teachings to effectively and securely manage and transfer large graphic files.

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to LINH BLACK whose telephone number is 571-272-

4106. The examiner can normally be reached on 8am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Safet Metjahic can be reached on 571-272-4023. The fax phone number for

the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

LINH BLACK
Examiner
Art Unit 2163

December 9, 2005.

Primary Examiner
Art Unit 2167